AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/812,277 Filing Date: March 29, 2004

Title: SEMICONDUCTING DEVICE WITH FOLDED INTERPOSER

Assignee: Intel Corporation

IN THE SPECIFICATION

Please amend the specification as follows:

The paragraphs beginning at page 4, line 1 are amended as follows:

Referring now also to FIG. 5, a flow diagram 50 illustrates an example method 50 of the present invention. The method includes [[52]] securing a first die 12 to a first section 20 of an interposer 16 that has a first conductor 27A and a second conductor 27B on a first surface 24 of interposer 16 (represented by box 52 in FIG. 5 and shown in see FIG. 6). The first die 12 may be secured to the first surface 24 of interposer 16 using solder or adhesives (among other methods).

The method 50 further includes [[54]] folding interposer 16 to secure first die 12 to a second section 22 of interposer 16 and to connect the first conductor 27A to the second conductor 27B to form a contact 26 (represented by box 54 in FIG. 5 and shown in see FIG. 7). The method [[50]] further includes [[56]] securing a second die 14 to a second surface 25 of interposer 16 (e.g., by soldering) such that first and second dice 12, 14 are stacked one on top of another and electrically coupled together by interposer 16 and contact 26 (represented by box 56 in FIG. 5 and shown in see FIG. 1).

The paragraph beginning at page 4, line 29 is amended as follows:

In some example embodiments of the method [[50]], interposer 16 may include a plurality of conductors on the first surface 24 of interposer 16 such that [[52]] folding interposer 16 includes connecting each of the plurality of conductors on a first section 20 of interposer 16 to conductors on a second section 22 of interposer 16 to form a plurality of contacts 26. Each of the contacts 26 extends from the first surface 24 of interposer 16 between first and second sections 20, 22 of interposer 16 (see, e.g., FIGS. 2-4).

The paragraph beginning at page 5, line 12 is amended as follows:

Forming a plurality of contacts 26 that extend from the first surface 24 of interposer 16 between the first and second sections 20, 22 of interposer 16 increases the number of possible connections between first and second dice 12, 14 as compared to just interposer 16 alone.

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The method Method 50 may also reduce the length of the conductive paths between first and second dice 12, 14 since contacts 26 can be positioned on all sides of first die 12 instead of just through the fold 18 in interposer 16. Increasing the number of available connections, and reducing the length of the connections, may reduce resistance, inductance and crosstalk to improve signal integrity relative to first and second dice 12, 14 and power delivery to second die 14 within semiconducting device 10.